



NIH210.001C1 SEQLIST.TXT

SEQUENCE LISTING

<110> Gottesman, Susan  
Storz, Gisela  
Repoila, Francis  
Wassarman, Karen  
Rosenow, Carsten

<120> IDENTIFICATION OF NEW SMALL RNAs AND  
ORFs OF E. COLI AS MEDIATORS OF CELL AND INTERCELL REGULATION

<130> NIH210.001C1

<150> PCT/US02/03147

<151> 2002-01-31

<150> US 60/266402

<151> 2001-02-01

<160> 161

<170> FastSEQ for windows Version 4.0

<210> 1

<211> 93

<212> DNA

<213> E. Coli

<400> 1  
gccccttcaa gagctaagcc actgagagt cggagataa gcgccgatg gggtagaaac 60  
ccttaagcct gtgtcgcaca gacttaaggg ttt 93

<210> 2

<211> 86

<212> DNA

<213> E. Coli

<400> 2  
tcgctgaaaa acataaccga taaaatgcta gctgtaccag gaaccacctc cttagcctgt 60  
gtaatctccc ttacacgggc ttattt 86

<210> 3

<211> 307

<212> DNA

<213> E. Coli

<400> 3  
actgcggccc tttccgccgt ctgcgaaacg ggcgctggct ttaggaaagg atgttccgtg 60  
ccgtaaatgc aggtgtttca cagcgcttgc tatcgcgga atatcgccag tgggtgctgtc 120  
gtgatgcggg cttcgcattg accgcacaat gaagatacgg tgcttttgta tcgtacttat 180  
tgtttctggg gcgctgttaa ccgaggtaaa taataaccgg agtctctccg gcgacaattt 240  
actggtgggt aacaaccttc agagcagcaa gtaagcccg atgccgccct ttgggcggca 300  
tatttta 307

<210> 4

<211> 65

<212> DNA

<213> E. Coli

<400> 4  
acggcgcagc caagatttcc ctggtgttgg cgcagtattc gcgcaccccg gtctagccgg 60  
ggtca 65

NIH210.001C1 SEQLIST.TXT

<210> 5  
 <211> 92  
 <212> DNA  
 <213> E. Coli

<400> 5  
 cgcgatcagg aagaccctcg cggagaacct gaaagcacga cattgctcac attgcttcca 60  
 gtattactta gccagccggg tgctggcttt tt 92

<210> 6  
 <211> 211  
 <212> DNA  
 <213> E. Coli

<400> 6  
 aacgagtaga tgctcattcc atctcttatg ttcgccttag tgcctcataa actccggaat 60  
 gacgcagagc cgtttacggg gcttatcgct cactgacaga tgctcgcttat gcctcatcag 120  
 acaccatgga cacaacgttg agtgaagcac ccacttgctg tcatacagac ctgttttaac 180  
 gcctgctccg taataagagc aggcgttttt t 211

<210> 7  
 <211> 141  
 <212> DNA  
 <213> E. Coli

<400> 7  
 catcaacacc aaccggaacc tccaccacgt gctcgaatga ggtgtgttga cgtcggggga 60  
 aaccctcctg tgtaccagcg ggatagagag aaagacaaag accggaanaa aaactaaagc 120  
 gcccttgtgg cgctttagtt t 141

<210> 8  
 <211> 79  
 <212> DNA  
 <213> E. Coli

<400> 8  
 tgccactgct tttctttgat gtccccattt tgtggagccc atcaaccccg ccatttccggt 60  
 tcaaggttga tgggttttt 79

<210> 9  
 <211> 272  
 <212> DNA  
 <213> E. Coli

<400> 9  
 tgtttaaaagc aaaggcgtaa agtagcaccc atagagcgag gacgctaaca ggaacaatga 60  
 ctcaggatga gggtcaggag cgccaggagg cgaagacaga ggattgtcag gaagacaaac 120  
 gtccggagac gtaattaaac ggaaatggaa tcaacacgga ttgttcccta aaggaaaaac 180  
 aggggtgtgtt ggcggcctgc aaggattgta agaccggtta agggttatga gtcaggaaaa 240  
 aaggcgacag agtaatctgt cgcctttttt ct 272

<210> 10  
 <211> 195  
 <212> DNA  
 <213> E. Coli

<400> 10  
 acattgtaaa ccagagttgc gaagggtacaa aaaattaacg ttttagcaat agctatataa 60  
 tatagcctgt gctatatctg tatgtaatgc aatcatccct caaggatcga cgggattagc 120  
 aagtcaggag gtcttatgaa tgagttcaag aggtgtatgc gcgtgttttag tcattctccc 180  
 tttaaagtac ggtta 195

NIH210.001C1 SEQLIST.TXT

<210> 11  
<211> 82  
<212> DNA  
<213> E. Coli

<400> 11  
atcccagagg tattgatagg tgaagtcaac ttcgggttga gcacatgaat tacaccagcc 60  
tgcgcatg cgcaggtttt tt 82

<210> 12  
<211> 92  
<212> DNA  
<213> E. Coli

<400> 12  
atcccagagg tattgattgg tgagattatt cgggtacgctc tcttcgtacc ctgtctcttg 60  
caccaacctg cgcggatgag caggtttttt tt 92

<210> 13  
<211> 278  
<212> DNA  
<213> E. Coli

<400> 13  
actataaagt cagcgaagga aatgcttctg gcttttaaca gataaaaaga gaccgaacac 60  
gattcctgta ttcgggtccag ggaaatggct cttgggagag agccgtgagc taaaagttgg 120  
cattaatgca ggccttagttg ccttgccctt taagaataga tgacgacgcc aggttttcca 180  
gtttgctgac aaaatgggtca ataaaaagcg tgggtggtcat cagctgaaat gttaaaaacc 240  
gcccgttctg gtgaaagaac tgaggcggtt tttttatt 278

<210> 14  
<211> 105  
<212> DNA  
<213> E. Coli

<400> 14  
agggcaaggc aactaagcct gcattaatgc caacttttag cgcacggctc tctcccaaga 60  
gccatttccc tggaccgaat acaggaatcg tggttcggtc ctttt 105

<210> 15  
<211> 144  
<212> DNA  
<213> E. Coli

<400> 15  
agtgagggtt agggagaggt ttccccctcc ccctgggtgtt cttagtaagc ctggaagcta 60  
atcactaaga gtatcaccag tatgatgacg tgcttcacatca taaccctttc cttattaaaa 120  
gccctcttct ccgggagagg cttt 144

<210> 16  
<211> 137  
<212> DNA  
<213> E. Coli

<400> 16  
agtgagggtg gagcgggggt tccccgccc tggtagtctt agtaagcggg gaagcttatg 60  
actaagagca ccacgatgat gagtagcttc atcatgaccc tttccttatt tatggccccct 120  
tcctcgggag gggcttt 137

<210> 17  
<211> 112  
<212> DNA  
<213> E. Coli

NIH210.001C1 SEQLIST.TXT

<400> 17  
 aggaacaagg gtaagggagg atttctcccc cctctgattg gctgttaata agctgcgaaa 60  
 cttacgagta acaacacaat cagtatgatg acgagcttca tcataaccct tt 112

<210> 18  
 <211> 139  
 <212> DNA  
 <213> E. Coli

<400> 18  
 cagggcaata tctctcttgc aggtgaatgc aacgtcaagc gatgggcggt gcgctccata 60  
 ttgtcttact tccttttttg aattactgca tagcacaatt gattcgtacg acgccgactt 120  
 tgatgagtcg gcttttttt 139

<210> 19  
 <211> 155  
 <212> DNA  
 <213> E. Coli

<400> 19  
 tagagtaaag gaacaagggt aagggaggat ttctcccccc tctgattggc tgtaataaag 60  
 ctgcgaaact tacgagtaac aacacaatca gtatgatgac gagcttcac ataacccttt 120  
 ccttctgtaa ggcccccttc ttcgggaggg gcttt 155

<210> 20  
 <211> 128  
 <212> DNA  
 <213> E. Coli

<400> 20  
 cataggggca atgataaaag gtggcaaaaa tgaatgtttc cagtagaact gtagtactga 60  
 taaatttctt tgctgctgtt ggtttgttta ctcttatctc tatgagattt ggctgggtta 120  
 tttgatgt 128

<210> 21  
 <211> 31  
 <212> PRT  
 <213> E. Coli

<400> 21  
 Met Asn Val Ser Ser Arg Thr Val Val Leu Ile Asn Phe Phe Ala Ala  
 1 5 10 15  
 Val Gly Leu Phe Thr Leu Ile Ser Met Arg Phe Gly Trp Phe Ile  
 20 25 30

<210> 22  
 <211> 84  
 <212> DNA  
 <213> E. Coli

<400> 22  
 ataattataa gagaggttgt tatgattgaa cgtgaactgg ggaactggaa agactttatc 60  
 gaagttatgc ttcgtaagta attc 84

<210> 23  
 <211> 19  
 <212> PRT  
 <213> E. Coli

<400> 23  
 Met Ile Glu Arg Glu Leu Gly Asn Trp Lys Asp Phe Ile Glu Val Met



NIH210.001C1 SEQLIST.TXT

<212> DNA

<213> E. Coli

<400> 28

gagtagttaa catgaagcgg agtagaacgg aagtggggcg ctggcgcatg cagcgtcagg 60  
ctagccgacg taaatcgcg tggcttgagg ggcaatcgcg ccgaaatatg cgtatccaca 120  
gcatcaggaa gtgcattcta aacaaacagc gtaactcgtt attgtttgcg atctacaata 180  
tctaaatgt 189

<210> 29

<211> 57

<212> PRT

<213> E. Coli

<400> 29

Met Lys Arg Ser Arg Thr Glu Val Gly Arg Trp Arg Met Gln Arg Gln  
1 5 10 15  
Ala Ser Arg Arg Lys Ser Arg Trp Leu Glu Gly Gln Ser Arg Arg Asn  
20 25 30  
Met Arg Ile His Ser Ile Arg Lys Cys Ile Leu Asn Lys Gln Arg Asn  
35 40 45  
Ser Leu Leu Phe Ala Ile Tyr Asn Ile  
50 55

<210> 30

<211> 117

<212> DNA

<213> E. Coli

<400> 30

aacggaggca aataatgctg ggtaatatga atgtttttat ggccgtactg ggaataattt 60  
tattttctgg ttttctggcc gcgtatttca gccacaaatg ggatgactaa tgaacgg 117

<210> 31

<211> 31

<212> PRT

<213> E. Coli

<400> 31

Met Leu Gly Asn Met Asn Val Phe Met Ala Val Leu Gly Ile Ile Leu  
1 5 10 15  
Phe Ser Gly Phe Leu Ala Ala Tyr Phe Ser His Lys Trp Asp Asp  
20 25 30

<210> 32

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

<400> 32

gcgcctcgtt atcatccaaa atacg 25

<210> 33

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide  
 <400> 33  
 gtcgccagc caatgctttc agtcg 25  
 <210> 34  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> oligonucleotide  
 <400> 34  
 attgatcgca cacctgacag ctgcc 25  
 <210> 35  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> oligonucleotide  
 <400> 35  
 gttgtcacc tggacctggt cgtac 25  
 <210> 36  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> oligonucleotide  
 <400> 36  
 tgaccgcgat ttgcacaaaa tgc 23  
 <210> 37  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> oligonucleotide  
 <400> 37  
 actcttaaatt ttcctatcaa aactcgc 27  
 <210> 38  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> oligonucleotide  
 <400> 38  
 ggtattttca gagattatga attgccg 27  
 <210> 39  
 <211> 25  
 <212> DNA

<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 39  
tcacctctcc ttcgagcgct actgg 25

<210> 40  
<211> 26  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 40  
aatgctctcc tgataatgtt aaactt 26

<210> 41  
<211> 26  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 41  
ggtagctcc gaagcaaaag ccggat 26

<210> 42  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 42  
taattccttt caaatgaaac ggagc 25

<210> 43  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 43  
ggactccctc attataatta ctgg 24

<210> 44  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 44  
ctccttaaac aaggacatta gtctacg 27



<210> 45  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 45  
 attcacctta cctaatttga ttcttcc 27  
  
 <210> 46  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 46  
 ccatcgcttg acgttgcatc cacctgc 27  
  
 <210> 47  
 <211> 26  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 47  
 gtcggcgtcg tacgaatcaa ttgtgc 26  
  
 <210> 48  
 <211> 26  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 48  
 gcacaattga ttcgtacgac gccgac 26  
  
 <210> 49  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 49  
 taaggataat attgcagatc gtaag 25  
  
 <210> 50  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide

<400> 50 atcatcaaac agcaacttgc cc	22
<210> 51 <211> 26 <212> DNA <213> Artificial Sequence	
<220> <223> oligonucleotide	
<400> 51 tgtccttctc ctgcaagaga attatt	26
<210> 52 <211> 26 <212> DNA <213> Artificial Sequence	
<220> <223> oligonucleotide	
<400> 52 gctaataata atgtcttttt cgctcc	26
<210> 53 <211> 31 <212> DNA <213> Artificial Sequence	
<220> <223> oligonucleotide	
<400> 53 gcttttgtga attaatttgt atatcgaagc g	31
<210> 54 <211> 28 <212> DNA <213> Artificial Sequence	
<220> <223> oligonucleotide	
<400> 54 tattaataacc ctctagattg agttaatc	28
<210> 55 <211> 27 <212> DNA <213> Artificial Sequence	
<220> <223> oligonucleotide	
<400> 55 cgatttacct cacttcacgc ctttcag	27
<210> 56 <211> 26 <212> DNA <213> Artificial Sequence	

<220>  
 <223> oligonucleotide  
  
 <400> 56  
 tgatcctgac ttaatgccgc aagttc 26  
  
 <210> 57  
 <211> 39  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 57  
 gcttatctcc ggcactctca gtggcttagc tcttgaagg 39  
  
 <210> 58  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 58  
 ttgctcacat ctcaacttaa tcgtgctc 28  
  
 <210> 59  
 <211> 34  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 59  
 atattccacc agctatttgt tagtgaataa aagg 34  
  
 <210> 60  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 60  
 tgattaattt cgattatttt tcccggatgg 30  
  
 <210> 61  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 61  
 attagaaaca ggaagcccct cagtcgag 28  
  
 <210> 62  
 <211> 30

<212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Oligonucleotide  
  
 <400> 62  
 ttattttccc cggaagcaca ttcacttcac 30  
  
 <210> 63  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Oligonucleotide  
  
 <400> 63  
 tgatctattg cacaacgagg aagc 24  
  
 <210> 64  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Oligonucleotide  
  
 <400> 64  
 tgcttactca tcaaaagtag cgccagattc 30  
  
 <210> 65  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Oligonucleotide  
  
 <400> 65  
 taatcgacgg acgatagata attcctg 27  
  
 <210> 66  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Oligonucleotide  
  
 <400> 66  
 ccaatgtgtc gcctttttca actttccg 28  
  
 <210> 67  
 <211> 33  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Oligonucleotide  
  
 <400> 67  
 cgatttatga gaataaatac tcatttaagg gtg 33

NIH210.001C1 SEQLIST.TXT

<210> 68	
<211> 25	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	
<400> 68	
aaatccgact ttagttacaa catac	25
<210> 69	
<211> 26	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	
<400> 69	
gaccagacct tcttgatgat gggcac	26
<210> 70	
<211> 24	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	
<400> 70	
cgacctcaat tccacgggat ctgg	24
<210> 71	
<211> 25	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	
<400> 71	
atttagctgt agtaatcact cgccg	25
<210> 72	
<211> 23	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	
<400> 72	
ggtctcctta ggccttatt gcg	23
<210> 73	
<211> 27	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	

NIH210.001C1 SEQLIST.TXT

<400> 73  
cgcccatg ctgttcttat tattccc 27

<210> 74  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> oligonucleotide

<400> 74  
tttatgacac ctgccactgc cgtc 24

<210> 75  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> oligonucleotide

<400> 75  
ctgtcaagtt atctgtttgt taagtcaagc 30

<210> 76  
<211> 26  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> oligonucleotide

<400> 76  
gctgtgaagc acctgcgttg ctcacg 26

<210> 77  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> oligonucleotide

<400> 77  
gctgtgaaac acctgcattt acggccacgg 30

<210> 78  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> oligonucleotide

<400> 78  
ccgtggccgt aaatgcaggt gtttcacagc 30

<210> 79  
<211> 23  
<212> DNA  
<213> Artificial Sequence

NIH210.001C1 SEQLIST.TXT

<220>  
 <223> oligonucleotide  
 <400> 79  
 cctttcgcaa ttgactgaaa cac 23  
 <210> 80  
 <211> 19  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> oligonucleotide  
 <400> 80  
 ggctagaccg gggtagcgcg 19  
 <210> 81  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> oligonucleotide  
 <400> 81  
 aaggtggtta ttacacctt agcg 24  
 <210> 82  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> oligonucleotide  
 <400> 82  
 gtcctctttg gggtaaattgt c 21  
 <210> 83  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> oligonucleotide  
 <400> 83  
 aatgctccgg ttcatgtca tc 22  
 <210> 84  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> oligonucleotide  
 <400> 84  
 tagttccttc tcacccggag 20  
 <210> 85

<211> 27  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 85  
 cacaagggcg ctttagtttg ttttccg 27  
  
 <210> 86  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 86  
 atcccctgag agtttaattt tcgtcaag 28  
  
 <210> 87  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 87  
 taattcgtcg taattcgtcc tcc 23  
  
 <210> 88  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 88  
 ctctgccttc ctgtttttgt tgtg 24  
  
 <210> 89  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 89  
 aaacgcattt gcaactgtcg gcgcttttcc 30  
  
 <210> 90  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 90



cttggttacct caaaaaatca cagtgtctcg 29

<210> 91  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> oligonucleotide

<400> 91  
 gcagtcggtg atgctggatt tgccctg 27

<210> 92  
 <211> 32  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> oligonucleotide

<400> 92  
 gtttttttac gggttaagccg caacgaccat tg 32

<210> 93  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> oligonucleotide

<400> 93  
 tagtagataa gtttttagata ac 22

<210> 94  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> oligonucleotide

<400> 94  
 taaaactgaa gttgccctga aaatg 25

<210> 95  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> oligonucleotide

<400> 95  
 tgatgagtgg ttctgcaaga gg 22

<210> 96  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> oligonucleotide

<400> 96  
taaaagacag attacctggc ctg 23

<210> 97  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> oligonucleotide

<400> 97  
cggactacct caaaataaag ctttatatac g 31

<210> 98  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> oligonucleotide

<400> 98  
gtcatgatac cttgattaaa aaacaaacag c 31

<210> 99  
<211> 26  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> oligonucleotide

<400> 99  
ggctataatg cgcacataac ctcttg 26

<210> 100  
<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> oligonucleotide

<400> 100  
aatcttttct ttttttttg ctaacgaata gcc 33

<210> 101  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> oligonucleotide

<400> 101  
gtccaacttt ttggggtcag tacaacttt g 31

<210> 102  
<211> 28  
<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 102

taataacgcc gttattaaat agcctgcc

28

<210> 103

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 103

taagcaacgt ctgcttactg cccctc

26

<210> 104

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 104

gtgatggctt ctgataaaga taaatttata gcc

33

<210> 105

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 105

taacaggcta agaggggc

18

<210> 106

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 106

attgccactc ttcttgatca aataaccg

28

<210> 107

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 107

aatgctctg ttgataattc aaattagtc

29

<210> 108  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 108  
 tagccgtttt attcagtata gatttgcg 28  
  
 <210> 109  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 109  
 gttcgtcggg aacccgtttc agc 23  
  
 <210> 110  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 110  
 atggcttaaa gagaggtgcc 20  
  
 <210> 111  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 111  
 cgtactttaa aggagaatg ac 22  
  
 <210> 112  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 112  
 gtgcttcctc attatggtga cg 22  
  
 <210> 113  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide

<400> 113 gaatggaggg agattacacg	20
<210> 114 <211> 21 <212> DNA <213> Artificial Sequence	
<220> <223> oligonucleotide	
<400> 114 ccttagtggg taaacgctta c	21
<210> 115 <211> 21 <212> DNA <213> Artificial Sequence	
<220> <223> oligonucleotide	
<400> 115 ctttcaggca gctaaggaaa g	21
<210> 116 <211> 29 <212> DNA <213> Artificial Sequence	
<220> <223> oligonucleotide	
<400> 116 caatatgtat tattgattga gtaaacggg	29
<210> 117 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> oligonucleotide	
<400> 117 cctcttccag gaataatccc	20
<210> 118 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> oligonucleotide	
<400> 118 cggaagcgg ttcacagatc	20
<210> 119 <211> 23 <212> DNA <213> Artificial Sequence	

<220>  
 <223> oligonucleotide  
  
 <400> 119  
 ctcgtaagtt tcgcagctta tta 23  
  
 <210> 120  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 120  
 tgaaattcct gtccgacagg 20  
  
 <210> 121  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 121  
 gcactaccgc aatgttattg c 21  
  
 <210> 122  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 122  
 gcttacccaa taaatagtta cacg 24  
  
 <210> 123  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 123  
 taaaacctgt cacaaatcac aaa 23  
  
 <210> 124  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 124  
 gtggcctgct tcaaactttc g 21  
  
 <210> 125  
 <211> 23

<212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Oligonucleotide  
 <400> 125  
 gtaaagtcta gcctggcggg tcg 23  
 <210> 126  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Oligonucleotide  
 <400> 126  
 taattctggg acgcctggca gatattttgc c 31  
 <210> 127  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Oligonucleotide  
 <400> 127  
 atcaacctca aaagggaat cggg 24  
 <210> 128  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Oligonucleotide  
 <400> 128  
 taacttggtg taagccggat cgg 23  
 <210> 129  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Oligonucleotide  
 <400> 129  
 tgaagcatct atcgccggtt gcg 23  
 <210> 130  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Oligonucleotide  
 <400> 130  
 gattagaaat ccttttgaaa gcgcattg 28

<210> 131	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	
<400> 131	
cttattgggc accgcaatgg	20
<210> 132	
<211> 27	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	
<400> 132	
cgaacacaat aaagatttaa ttcagcc	27
<210> 133	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	
<400> 133	
ctgatgctac tgtgtcaacg	20
<210> 134	
<211> 22	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	
<400> 134	
aataatcaga catagcttag gc	22
<210> 135	
<211> 21	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	
<400> 135	
gccgtgatgg ttttcgcgtt c	21
<210> 136	
<211> 21	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	



<400> 136 tattttcctc ccgcgctaaa g	21
<210> 137 <211> 23 <212> DNA <213> Artificial Sequence	
<220> <223> oligonucleotide	
<400> 137 ttcagctgat gaccaccacg ctt	23
<210> 138 <211> 23 <212> DNA <213> Artificial Sequence	
<220> <223> oligonucleotide	
<400> 138 gagttgtcag agcaggatga ttc	23
<210> 139 <211> 22 <212> DNA <213> Artificial Sequence	
<220> <223> oligonucleotide	
<400> 139 tatctgcgct tatcctttat gg	22
<210> 140 <211> 23 <212> DNA <213> Artificial Sequence	
<220> <223> oligonucleotide	
<400> 140 cctttacggt gataaccgtc gcg	23
<210> 141 <211> 25 <212> DNA <213> Artificial Sequence	
<220> <223> oligonucleotide	
<400> 141 ctgacaagcc tctcattctc ttgtc	25
<210> 142 <211> 23 <212> DNA <213> Artificial Sequence	

NIH210.001C1 SEQLIST.TXT

<220>  
 <223> Oligonucleotide  
 <400> 142  
 gagaattatc gaggtccggt atc 23  
 <210> 143  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Oligonucleotide  
 <400> 143  
 ctacgcgtta gcgatagact gc 22  
 <210> 144  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Oligonucleotide  
 <400> 144  
 aggcttacta agaacaccag ggggagggga a 31  
 <210> 145  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Oligonucleotide  
 <400> 145  
 agtcataagc ttccccgctt actaagacta 30  
 <210> 146  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Oligonucleotide  
 <400> 146  
 cctcaaatcg gccataataa cc 22  
 <210> 147  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Oligonucleotide  
 <400> 147  
 taaacaccgt cgtcagaaat gc 22  
 <210> 148

<211> 25  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 148  
 tagactttta tccactttat tgctg 25  
  
 <210> 149  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 149  
 gtgtgccctt cgcgatatg gcgtg 25  
  
 <210> 150  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 150  
 cctttacgtg ggcggtgatt ttgtc 25  
  
 <210> 151  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 151  
 tagctttgct cctggatggt tgcc 24  
  
 <210> 152  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 152  
 gctgtaattt attcagcggt tgtacatacg 30  
  
 <210> 153  
 <211> 26  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> oligonucleotide  
  
 <400> 153

tcagtcaact cgctgcggcg tggtac	26
<210> 154	
<211> 28	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	
<400> 154	
cttattgttg cttagttagg gtagtcac	28
<210> 155	
<211> 26	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	
<400> 155	
cagtcagtct caggggagga gcaatc	26
<210> 156	
<211> 30	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	
<400> 156	
tgaatgcaca ataaaaaat cccgaccctg	30
<210> 157	
<211> 25	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	
<400> 157	
agtcgcgcag tactcctctt accag	25
<210> 158	
<211> 24	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> oligonucleotide	
<400> 158	
taatttctca tcaggcggct ctgc	24
<210> 159	
<211> 24	
<212> DNA	
<213> Artificial Sequence	
<220>	

<223> oligonucleotide

<400> 159

taacattatc agcctgctga cggc

24

<210> 160

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

<400> 160

ggccgaattc gtagggtaga gaggttaag

28

<210> 161

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

<400> 161

ggccgatcc gtcattactg actggggcgg

30